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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,282	01/11/2002	Chander P. Chawla	P 283276 D1144	4568
909	7590	07/01/2004	EXAMINER	
PILLSBURY WINTHROP, LLP P.O. BOX 10500 MCLEAN, VA 22102			GRAY, JILL M	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/042,282	<b>Applicant(s)</b> CHAWLA ET AL.	
	<b>Examiner</b> Jill M. Gray	<b>Art Unit</b> 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 7 and 14 are objected to because of the following informalities: In claims 7 and 14, line 1, "the" should be capitalized. Appropriate correction is required.

### ***Specification***

The use of trademarks such as "IRGACURE 184" and "IRGANOX 1035" has been noted in this application. All trademarks should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Chawla et al, 6,376,571 B1 (Chawla) or Montgomery et al, US 2002/0147248 A1 (Montgomery)

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Chawla teaches a radiation curable composition comprising a radiation curable oligomer (column 5, lines 7-8) and reactive diluent (column 5, lines 27-29). In addition, Chawla teaches the inclusion of a cure speed enhancing monomer or oligomer that is a propoxylated monomer or oligomer comprising at least one propoxy group bonded to an acrylate functional group, per claims 2, 7, and 9. See column 7, lines 24-41. This propoxylated monomer or oligomer has the structure as set forth in Formula I of Chawla, (note column 7) wherein  $R_2$  can be an aliphatic moiety having at least 7 carbon atoms, as required by claims 1, 5-6, and 8. See column 8, lines 6-23. Also, said propoxylated monomer or oligomer can be present in amounts of between 5 wt% and

Art Unit: 1774

about 80 wt%, as required by claim 3 and the radiation curable oligomer can be present in amounts within applicants' range as required by claim 4. See column 7, lines 20-24 and Table 1. The composition may also contain a photoinitiator and adhesion promoter, wherein the adhesion promoter can be gamma-mercaptopropyl trimethoxysilane, as required by claims 10, 11, and 12, and has a cure speed of less than  $0.030 \text{ J/cm}^2$ , as required by claim 13. See column 11, lines 5-9 and 18-23 and column 12, lines 65-66. As to claims 15-19, Chawla teaches coated optical fibers and that when the coating is an inner primary layer, the modulus is preferably less than about 5 MPa and that when the coating is an outer primary layer, the modulus can be between about 500 to about 1500 MPa as required by applicants. See column 12, lines 21 and 47-54. Regarding claim 14, the composition of Chawla is the same as that contemplated by applicants. It is the position of the examiner that the same composition necessarily have the same properties, therefore, this limitation is inherent in the composition of Chawla.

Montgomery teaches a radiation curable composition comprising a radiation curable oligomer and a reactive diluent that is a monomer or mixture of monomers having acrylate functionality such as ethoxylated lauryl acrylate and ethoxylated isodecyl acrylate, as required by applicants in claims 1-2 and 5-9. See page 3, section [0031]. The radiation curable oligomer and reactive diluent are present in amounts as claimed by applicants in claims 3-4. See Table 1. In addition, Montgomery teaches the addition of a photoinitiator and gamma-mercaptopropyltrimethoxysilane, as required by claims 10-12. See page 4, sections [0064] through [0081] and page 5, section [0101]. Montgomery also teaches coated optical fibers wherein when the composition is used

Art Unit: 1774

as a primary coating composition, the coating has a modulus of less than 10 MPa and most preferably of from about 0.3MPa to about 3MPa, further teaching that when the coating is used as a secondary coating composition, the coating has a modulus of from about 200MPa to about 2000MPa, as required by claims 15-19. See page 1, section [0002] and page 4, sections [0082] and [0083]. Regarding claims 13 and 14, Montgomery teaches the same composition contemplated by applicants, wherein the same composition necessarily has the same properties. Accordingly, the limitations of claims 13 and 14 are inherent in the composition of Montgomery.

Therefore, the prior art teachings of Chawla and Montgomery anticipate the invention as claimed in present claims 1-19.

Claims 1-10 and 12-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Bishop et al, 6,714,712 B2 (Bishop)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Bishop teaches a radiation curable coating composition and optical fiber coated therewith comprising a radiation curable oligomer, reactive diluent and photoinitiator, per claims 1, 12 and 15. When the composition of Bishop is used as a primary coating, the coating has a modulus of less than about 5MPa, and when said composition is used

Art Unit: 1774

as a secondary coating, the composition has a modulus of at least about 5MPa, further teaching a modulus within applicants' range, as required by claims 16-19. Note abstract and Table 2. The radiation curable oligomer can be present in a preferred amount of at least about 30 wt% with a most preferred amount of at least about 70 wt% and the reactive diluent is present in an amount of at least about 5 wt% as required by claims 3 and 4. See column 16, lines 19-39. The reactive diluent can be a compound of Formula 6 wherein R<sup>8</sup> can be an alkyl group containing 1 to 12 carbon atoms or alkoxyated aliphatic monofunctional monomers such as ethoxyated isodecyl (meth)acrylate, ethoxyated lauryl (meth)acrylate, and the like, as claimed by applicants in claims 5-8 wherein additional reactive diluents can be added, per claim 9. See column 18, lines 35-52 and column 19, lines 21-59. In addition, the composition can contain a silane compound as required by claim 10. See column 20, line 52. As to claims 13 and 14, the composition of Bishop is substantially the same as that contemplated by applicants and the same composition necessarily has the same properties. Accordingly, these limitations are inherent in the composition of Bishop.

Therefore, the teachings of Bishop anticipate the invention as claimed in present claims 1-10 and 12-19.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 11 is rejected under 35 U.S.C. 103(a) as being obvious over Bishop et al, 6,714,712 B2 (Bishop) in view of Chawla et al, 6,376,571 B1 (Chawla).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29,



1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2). Bishop is as applied above to claims 1-10 and 12-19 but does not teach the specific silane coupling agent. Chawla, as set forth previously, teaches a radiation curable composition that is substantially similar to that taught by Bishop and as disclosed by applicants wherein a gamma-mercaptopropyl trimethoxysilane is added as the adhesion promoter. It is the position of the examiner that the specific silane adhesion promoter is not a matter of invention, rather the preferential selection by the skilled artisan of one silane adhesion promoter from among many, said silane adhesion promoter being used for its art recognized purpose. Moreover, at the time the invention was made, the teachings of Chawla would have provided direction to the skilled artisan to include a gamma-mercaptopropyl trimethoxysilane silane adhesion promoter in radiation curable compositions of the type contemplated by applicants and as taught by Bishop, and a suggestion that the usage of said gamma-mercaptopropyl trimethoxy silane would result in enhancing the adhesion of the curable coating composition to the optical fiber surface. Accordingly, it would have been obvious to use as the silane adhesion promoter of Bishop, a compound of the type set forth by applicants with the reasonable expectation of success of enhancing the adhesion of the coating composition to the optical fiber surface.

Therefore, the combined teachings of Bishop and Chawla would have rendered obvious the invention as claimed in present claim 11.

Art Unit: 1774

No claims are allowed.

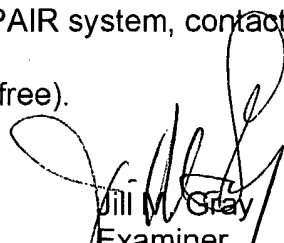
**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jill M. Gray  
Examiner  
Art Unit 1774

jmg